# **Board of Education Agenda Item**

Item:		F. Date: November 29, 2006
Topic	and Occ Career	eview of Revisions of Industry, Professional, or Trade Association Certification Examination cupational Competency Assessments to Meet the Requirements for the Board of Education and Technical Education and Advanced Mathematics and Technology Seals and the Studend Verified Credit.
Prese	nter:	Dr. Linda Wallinger, Assistant Superintendent for Instruction
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Origii	n:	
	Topic p	resented for information only (no board action required)
X	X	eview required by State or federal law or regulation Board of Education regulation Other:
X	Action	requested at this meeting Action requested at future meeting:
Previo	ous Revi	ew/Action:
	No prev	vious board review/action
<u>X</u>	Previou date action	September 28, 2000; April 26, 2001; April 24 & 25, 2002; May 28, 2003; June 25, 2003; February 25, 2004; February 23, 2005; and November 30, 2005  Additions and/or deletions were made to the list of board-approved examinations,
		assessments, and licensures.

## **Background Information:**

The Regulations Establishing Standards for Accrediting Public Schools in Virginia, requirements for graduation 8 VAC 20-131-50.I.3, provide students who demonstrate academic excellence and/or outstanding achievement the opportunity to earn the Board of Education's Career and Technical Education Seal.

8 VAC 20-131-50.I.3 - "The Board of Education's Career and Technical Education Seal will be awarded to students who earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses; or (i) pass an examination or occupational competency assessment in a career and technical education concentration or specialization that confers certification or an occupational competency credential from a recognized industry, trade or professional association or (ii) acquire a professional license in that career and technical education field from the Commonwealth of Virginia. The Board shall approve all professional licenses and examinations used to satisfy these requirements."

The *Regulations Establishing Standards for Accrediting Public Schools in Virginia*, requirements for graduation 8 VAC 20-131-50.I.4, provide students who demonstrate academic excellence and/or outstanding achievement the opportunity to earn the Board of Education's Seal of Advanced Mathematics and Technology.

8 VAC 20-131-50.I.4 – "The Board of Education's Seal of Advanced Mathematics and Technology will be awarded to students who earn either a Standard or Advanced Studies Diploma and (i) satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a "B" average or better, and (ii) either (a) pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association, (b) acquire a professional license in a career and technical education field from the Commonwealth of Virginia, or (c) pass an examination approved by the Board that confers college-level credit in a technology or computer science area. The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements."

The Regulations Establishing Standards for Accrediting Public Schools in Virginia make the following provisions relative to students earning verified units of credit:

### 8 VAC 20-131-110.C Standard and verified units of credit

- ...The Board may from time to time approve additional tests for the purpose of awarding verified credit. Such additional tests, which enable students to earn verified units of credit, must, at a minimum, meet the following criteria:
- 1. The test must be standardized and graded independently of the school or school division in which the test is given;
- 2. The test must be knowledge-based;
- 3. The test must be administered on a multi-state or international basis, or administered as part of another state's accountability assessment program; and
- 4. To be counted in a specific academic area, the test must measure content that incorporates or exceeds the SOL content in the course for which verified credit is given.

8 VAC 20-131-50.B.2 (Footnotes 5 and 6 and C., Footnote 5) Requirements for graduation Verified Credits Required

Student Selected Test <sup>5</sup>

<sup>5</sup> A student may utilize additional assessments for earning verified credit in computer science, technology, career and technical education, or other areas as prescribed by the Board in 8VAC 20-131-110.

<sup>6</sup> Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

## **Summary of Major Elements**

The attached list of industry, professional, trade association certifications, or occupational competency assessments meets the Board's requirements as noted in 8 VAC 20-131-50.I.3, 8 VAC 20-131-50.I.4, 8 VAC 20-131-110, and 8 VAC 20-131-50.B.4 (Footnotes 5 and 6 and C., Footnote 5) for the Career and Technical Education Seal, the Seal of Advanced Mathematics and Technology, and student-selected verified credit.

The 16 additional industry certification examinations and occupational competency assessments in bold print have been identified as meeting criteria to satisfy requirements for the Career and Technical Education Seal and student-selected verified credit. Seven of these examinations have been identified as meeting criteria to satisfy requirements for the Advanced Mathematics and Technology Seal. A list of previously approved examinations and recommended additional examinations is attached.

Industry, professional, and trade association certifications are continually being revised or discontinued to stay current with technology and new techniques. These changes may be such that individual certifications are no longer available, no longer meet the Board of Education's criteria for diploma seals or student-selected verified credit, or require additional criteria such as work experience beyond high school. Changes have been made in four of the certifications that were previously approved by the board. A list of certification examinations that are recommended for deletion from the board-approved list is attached.

As a result of the proposed additions and deletions to this list there are:

- 187 credentials eligible for student-selected verified credit;
- 187 credentials eligible for the Career and Technical Education Seal; and
- 57 credentials eligible for the Advanced Mathematics and Technology Seal.

## **Superintendent's Recommendation:**

The Superintendent of Public Instruction recommends that the Board of Education waive first review and approve the revised list of industry certification examinations, occupational competency assessments, and licenses to meet the requirements for the Board of Education's Career and Technical Education and Advanced Mathematics and Technology Seals and the student-selected verified credit.

#### **Impact on Resources:**

Federal Carl Perkins funds may be used to help teachers and programs become certified. State funds will be used to assist students to become certified or pass an occupational competency assessment.

#### **Timetable for Further Review/Action:**

After final approval, a Superintendent's Memorandum will notify school divisions of these additions to and deletions from the approved list of industry certifications, occupational competency assessments, and licenses.

Board of Education Approved Industry Certifications, Occupational Competency Assessments, and Licensures					
	November 29, 2006 (proposed)				
		Meets B	Meets Board of Education Criteria		
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal	
Agricultural Education					
Agriculture Mechanics Assessment	National Occupational Competency	Х	X		
Commercial Pesticide Applicator Certification	Testing Institute (NOCTI)  Virginia Department of Agriculture and Consumer Services	X	X		
Floriculture-Greenhouse Assessment	National Occupational Competency Testing Institute (NOCTI)	X	X		
Floriculture Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Forestry Products & Processing Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х		
Greenhouse Operators Certification Program	Southeast Greenhouse Growers Association	Х	Х		
Horticulture-Landscaping Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Horticulture-Olericulture Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Outdoor Power Equipment Certifications (Pass any one Outdoor Power Equipment exam)	Equipment and Engine Training Council	Х	Х		
Production Agriculture Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Small Engine Technology Assessment	National Occupational Competency Testing Institute (NOCTI)	х	х		
Business and Information Technology					
Accounting-Basic Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Accounting - Complete Assessment	National Occupational Competency Testing Institute (NOCTI)	X	Х		
Administrative Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х		
Adobe Certified Expert (ACE)	Adobe Systems Incorporated	X	X	X	
Brainbench Network Administration Certifications (Pass any one test in this category)	Brainbench	Х	Х	Х	
Brainbench Systems Administration Certifications (Pass any one test in this category)	Brainbench	X	X	X	
Brainbench Software Development Certifications (Pass any one test in this category)		X	X	Х	
Brainbench Web Design and Development Certifications (Pass any one test in this category)	Brainbench	Х	X	X	

	November 29, 2006 (proposed)			
		Meets 1	Board of Educat	tion Criteria
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Business and Information Technology				
<u> </u>				
Brainbench Web Administration Certifications (Pass any one test in this category)		X	X	X
Brainbench Desktop Publishing Certifications (Pass any one test in this category)	Brainbench	X	Х	Х
Certification for Legal Professionals (ALS)	Associate for Legal Professional (NALS)	X	X	
Certified Internet Webmaster Associate	ProsoftTraining	Х	X	X
Certified Internet Webmaster Associate: Internet Business Foundations Examination	ProsoftTraining	Х	X	Х
Certified Internet Webmaster Associate: Site Development Foundations Examination	ProsoftTraining	X	Х	Х
Certified Internet Webmaster Associate: Network Technology Foundations Examination	ProsoftTraining	X	Х	X
Certified Internet Webmaster Professional	ProsoftTraining	X	X	Х
Certified Novell Administrator (CNA)	Novell	X	X	Х
Customer Support Specialist Certification	Help Desk Institute	X	X	Х
Fundamentals of Wireless LANs Examination	Cisco Systems	X	X	X
International Computer Driving License	ICDL US	X	X	X
Fundamental Business Concepts	ASK Institute (DECA/MarkED)	Х	X	
IC3 Certification	Certiport	X	X	X
iNet+ Certification	CompTIA	X	X	X
Java Programming Examination	Cisco Systems	X	X	X
Linux+ Certification	CompTIA	X	X	Х
Macromedia Certified Professional	Macromedia	X	X	X
Master CIW Administrator Certification	ProsoftTraining	X	X	X
Master CIW Designer Certification	ProsoftTraining	X	X	X
Master CIW Enterprise Developer Certification	ProsoftTraining	X	X	X
Master CIW Web Site Manager Certification	ProsoftTraining	X	X	X
Microsoft Certified Applications Developer (MCAD)	Microsoft	X	X	X
Microsoft Certified Professional (Pass any one Microsoft Professional certification exam)	Microsoft	X	X	X
Microsoft Certified Systems Administrator (MCSA)	Microsoft	X	X	X
Microsoft Certified Systems Engineer (MCSE)	Microsoft	X	X	X
Microsoft Office Specialist (MOS)-(Pass any one unique MOS exam at the core level)	Microsoft	X	X	
Network+ Certification	CompTIA	X	X	X
Oracle Certification Program Examinations (Pass any one Oracle certification exam)	Oracle Corporation	Х	Х	Х
Sun Certified Associate for Java 2 Platform	Sun Microsystems	Х	X	X
Supporting Users and Troubleshooting a Microsoft Windows XP Operating System (Microsoft Exam: 70-271)	Microsoft	Х	х	Х

Board of Education Approved Industry Ce		cy Assessmen	nts, and Licens	sures
	November 29, 2006 (proposed)	Meets Bosse	l of Education	Critoria
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Business and Information Technology				
Supporting Users and Troubleshooting Desktop Applications on a Microsoft Windows XP Operating System (Microsoft Exam: 70-272)	Microsoft	х	х	х
Unix Examination	Cisco Systems	X	X	Х
Web Design Examination	Cisco Systems	X	Х	Х
WOW Certified Apprentice Webmaster (CAW)	World Organization of Webmasters	X	X	Х
WOW Certified Web Administrator Apprentice (CWAA)	World Organization of Webmasters	X	X	Х
WOW Certified Web Designer Apprentice (CWDSA)	World Organization of Webmasters	X	X	X
WOW Certified Web Developer Apprentice (CWDVA)	World Organization of Webmasters	Х	X	Х
Family and Consumer Sciences				
Commercial Foods Assessment	National Occupational Competency Testing Institute (NOCTI)	X	X	
Early Childhood Care and Education Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Food Production Management and Services Assessment	National Occupational Competency Testing Institute (NOCTI)	X	X	
Hospitality ManagementFood and Beverage Option Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Hospitality Management-Lodging Option Assessment	National Occupational Competency Testing Institute (NOCTI)	X	X	
ProStart Program Certification (Levels I and/or 2)	Education Foundation of the National Restaurant Association	Х	X	
Retail Commercial Baking Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
START Certification (Hospitality Skills)	American Hotel and Lodging Association (AH&LA)	Х	Х	
Health and Medical Sciences				
Certified Dental Assistant: Infection Control Examination (ICE)	Dental Assisting National Board, Inc.	X	Х	

	November 29, 2006 (proposed)			
	hovember 29, 2000 (proposed)	Meets	Board of Educat	tion Criteria
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Health and Medical Sciences				
nearth and medical belences				
Certified Dental Assistant: Radiation Health & Safety Examination (RHS)	Dental Assisting National Board, Inc.	Х	X	
Dental Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Health Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Home Health Aide Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Medical Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
National Health Care Foundation Skills Standards Assessment	Science & Technical Education	Х	X	
NRDA Certification (Dental Assisting)	National Allied Health Registry/National Association for Health Professionals	Х	X	
NRDA Certification (Medical Assisting)	National Allied Health Registry/National Association for Health Professionals	Х	X	
Nurse Aide	Virginia Board of Nursing	Х	Х	
Nursing Assisting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Virginia Pharmacy Technician Examination	Virginia Board of Pharmacy	X	X	
Marketing Education				
Fundamental Marketing Concepts	ASK Institute (DECA/MarkED)	x	х	
Lodging Management Program Certification (Levels 1 and/or 2)	American Hotel and Lodging Association (AH&LA)	X	X	
National Professional Certification in Customer Service	National Retail Federation Foundation	Х	X	
Retail Trades Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Sales Certification	National Retail Federation Foundation	Х	х	

	November 29, 2006 (proposed)			
			Board of Educat	
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Technology Education				
AutoCAD Certifications	Brainbench	Х	X	
Certified SolidWorks Professional	SolidWorks Corporation	X	X	
Electronic Technology Assessment	National Occupational Competency Testing Institute (NOCTI)	X	X	
Manufacturing Technology Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Pre-Engineering Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Pre-Skills Assessment for Mastercam Assessment	MastercamAdministered by National Occupational Competency Testing Institute (NOCTI)	Х	х	
Trade and Industrial Education				
A+ Certification (2003 objectives)	CompTIA	Х	Х	X
A+ Certification (pass any one exam from 2006 certification program)	CompTIA	Х	х	х
A+ Certification: Operating Systems Technologies Examination	CompTIA	X	X	X
A+ Certification: Core Hardware Examination	CompTIA	X	Х	X
Access Certification	American Culinary Federation, Inc. (ACF)	X	X	
Advertising and Design Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Air Conditioning Certification	HVAC Excellence	Х	Х	
Audio-Visual Communications Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X	
Automotive Technician Examination (ASE)—(Pass any one exam from Automobile Technician Test Series)	National Institute for Automotive Service Excellence	Х	X	
Architectural Drafting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Automotive Youth Educational Systems (AYES) Exit Examinations (Pass any two AYES exit exams)	Automotive Youth Educational Systems	Х	X	
Basic Principles of Construction: Residential Construction Academy Examination	Delmar Thomson Learning/Home Builders Institute	Х	Х	

-Board of Education Approved Industry Certifications, Occupational Competency Assessments, and Licensures				
No	ovember 29, 2006 (proposed)			
		Meets Board of Education Criter		
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Trade and Industrial Education				
Basic Installer Exam, Mobile Electronics Certified Professional	Consumer Electronics Association	х	х	
BICSI Registered Installer Certification, Level 1	BICSI (International Telecommunications Association)	Х	Х	
CAD Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Cabinetmaking Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Carpentry Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Carpentry: Residential Construction Academy Examination	Delmar Thomson Learning/Home Builders Institute	Х	Х	
Carpentry, National Construction Career Test	National Center For Construction Education & Research (NCCER)	Х	Х	
Carpentry Level One, National Construction Career Test	National Center for Construction Education & Research (NCCER)	Х	Х	
Certified Computer Service Technician	Electronics Technicians Association, International (ETA)	Х	Х	X
Certified Electronics Technician Associate (CET)	Electronics Technicians Association, International (ETA)	Х	Х	
Certified Fiber Optics Installer (CFOI)	The Association of Communications & Electronics Schools, International	X	Х	
Certified Satellite Dish Installer	Electronics Technicians Association, International (ETA)	Х	Х	
CISCO CCNA Academy End-of-Course Examinations (Pass any two end-of-course exams, Levels 1-4)	CISCO Systems	Х	Х	X
CISCO Certified Networking Associate (CCNA)	CISCO Systems	X	Х	X

Board of Education Approved Industry Cer		cy Assessmen	nts, and Licens	ures	
No	vember 29, 2006 (proposed)				
		Meets :	Meets Board of Education Criteria		
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal	
Trade and Industrial Education					
CISCO CCNA Examination: Interconnecting CISCO Networking Devices Examination	CISCO Systems	Х	X	Х	
CISCO CCNA Examination: Introduction to CISCO Networking Technologies Examination	CISCO Systems	Х	Х	Х	
Collision Repair Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х		
Collision Repair and Refinishing Technician (ASE)-(Pass any one exam from Collision Repair & Refinish Test Series)	National Institute for Automotive Service Excellence	X	Х		
Collision Repair/Refinishing Technology Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Computer Networking Fundamentals Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	х	х	
Computer Repair Technology Assessment	National Occupational Competency	Х	Х	Х	
	Testing Institute (NOCTI)				
Commercial Air Conditioning Certification	HVAC Excellence	Х	X		
Commercial Refrigeration Certification	HVAC Excellence	X	X		
Construction Electricity Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Construction Masonry-Blocklaying Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х		
Construction Masonry-Bricklaying Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х		
Copper Based Cabling Certification	RBT Systems, Inc.	X	X		
Core: Introductory Craft Skills, National Construction Career Test	National Center For Construction Education & Research (NCCER)	X	X		
Cosmetology Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Criminal Justice Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х		
Data Cabling Installer Certification (DCIC)	Electronics Technicians Association, International (ETA)	Х	X		
Diesel Engine Mechanics Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Drafter Certification	American Design Drafting Association	Х	X		

Board of Education Approved Industry Cer		ncy Assessmen	nts, and Licens	ures	
	November 29, 2006 (proposed)	Washer !	Daniel of Educat	dan Gudhauda	
		Meets	Meets Board of Education Criteria		
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal	
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Trade and Industrial Education					
Electric Heat Certification	HVAC Excellence	X	X		
Electrical Certification	HVAC Excellence	X	X		
Electrical Construction Assessment	National Occupational Competency	X	X		
Electrical construction Assessment	Testing Institute (NOCTI)	A	A		
Electrical Occupations Assessment	National Occupational Competency	х	х		
	Testing Institute (NOCTI)				
Electrical Principles: Residential Construction Academy Examination	Delmar Thomson Learning/Home Builders Institute	Х	X		
Electrical, National Construction Career Test	National Center For Construction Education & Research (NCCER)	X	X		
Electronics Assessment	National Occupational Competency Testing Institute (NOCTI)	X	X		
EPA Technician Certification (Levels I, II, or III)	Environmental Protection Agency (Authorized Entity)	X	Х		
Fiber Optic Network Cabling Certification	RBT Systems, Inc.	X	X		
Fiber Optics Installer Certification	Electronics Technicians Association, International (ETA)	X	Х		
Firefighter I Certification	Virginia Department of Fire Programs	X	Х		
Gas Heat Certification	HVAC Excellence	X	X		
General Drafting and Design Assessment	National Occupational Competency Testing Institute (NOCTI)	X	Х		
Graphic Communication Technology Assessment	National Occupational Competency Testing Institute (NOCTI)	X	Х		
Graymark Cable Installation Certification	Graymark International	Х	X		
Heat Pump Certification	HVAC Excellence	X	X		
Heating, Electrical, Air Conditioning Technology (HEAT) Examination	HVAC Excellence	X	X		
House Wiring: Residential Construction Academy Examination	Delmar Thomson Learning/Home Builders Institute	X	Х		
HTI+ Systems Infrastructure and Integration Examination	CompTIA	Х	х	х	
HTI+ Residential Systems Examination	CompTIA	х	х	Х	
HVAC: Residential Construction Academy Examination	Delmar Thomson Learning/Home Builders Institute	X	X		
HVAC, National Construction Career Test	National Center For Construction Education & Research (NCCER)	X	Х		
Industrial Maintenance Mechanic Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	X		
Installer (or Service) Core Certification (HVAC)	North American Technician Excellence, Inc. (NATE)	X	Х		

Board of Education Approved Industry Cer	November 29, 2006 (proposed)	, IIDDODDINGI	, and Election	<del></del>
	hovember 29, 2006 (proposed)	Meets 1	Board of Educat	ion Criteria
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Trade and Industrial Education				
IT Essentials 1 Examination (PC Hardware and Software)	Cisco Systems	Х	X	Х
IT Essentials 2 Examination (Network Operating Systems)	Cisco Systems	Х	Х	X
Light Commercial Heating & Air Conditioning Certification	Air Conditioning and Refrigeration Institute	Х	Х	
Machining SkillsLevel I (Pass any one Machining (Level 1) examination with performance component)	National Institute for Metalworking Skills (NIMS)	Х	Х	
Masonry, National Construction Career Test	National Center For Construction Education & Research (NCCER)	Х	Х	
Metalworking and Fabrication Assessment	National Occupational Competency Testing Institute (NOCTI)	X	Х	
National Automotive Technicians Education Foundation (NATEF) End of Program Test Series Examinations (Pass any two NATEF, End of Program Test Series, exams)	National Automotive Technicians Education Foundation	Х	X	
Plumbing Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Plumbing: Residential Construction Academy Examination	Delmar Thomson Learning/Home Builders Institute	Х	Х	
Precision Machining Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Protective Services Assessment	National Occupational Competency	Х	Х	
	Testing Institute (NOCTI)			
PrintED Certification	Graphic Arts Education and Research Foundation	Х	Х	
Refinishing Technology Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Residential Air-Conditioning and Heating Certification	Air Conditioning and Refrigeration Institute	Х	Х	
SENSE Training Program Certification (Level 1, Entry-level Welder)	American Welding Society (AWS)	Х	Х	
Student Electronics Technician Certification (SET)	Electronics Technicians Association, International (ETA)	Х	Х	
Telecommunications Electronics Technician Certification	Electronics Technicians Association, International OETA)	Х	Х	
Television Broadcasting Assessment	National Occupational Competency Testing Institute (NOCTI)	Х	Х	
Visual Communications Assessment	National Occupational Competency Testing Institute (NOCTI)	X	Х	

Board of Education Approved Industry Ce		icy Assessmen	us, and Licens	sures
	November 29, 2006 (proposed)	Meets P	oard of Educat	ion Criteria
Name of Credential	Issuing Organization	Student Selected Verified Credit	Career and Technical Education Seal	Advanced Mathematics and Technology Seal
Trade and Industrial Education				
Voice and Data Cabling Examination	Cisco Systems	X	Х	X
Welding Assessment	National Occupational Competency Testing Institute (NOCTI)	X	Х	
Welding, National Construction Career Test	National Center for Construction Education & Research (NCCER)	Х	Х	
License				
Barbers	Board of Barbers and Cosmetology (Virginia Department of Professional and Occupational Regulation)	Х	Х	
Cosmetology	Board of Barbers and Cosmetology (Virginia Department of Professional and Occupational Regulation)	Х	Х	
Nail Technician	Board of Barbers and Cosmetology (Virginia Department of Professional and Occupational Regulation)	Х	Х	
Real Estate Salesperson	Virginia Real Estate Board (Dept. of Professional & Occupational Regulation)	Х	Х	
Examination				
Advanced Placement Computer Science A	The College Board	Passing Score = 3		Passing Score = 3
Advanced Placement Computer Science AB	The College Board	Passing Score = 3		Passing Score = 3
College Level Examination Program (CLEP): Information Systems and Computer Applications	The College Board	Passing Score = 52		Passing Score = 52
International Baccalaureate Computer Science (Standard Level)	The International Baccalaureate Organization	Passing Score = 3		Passing Score = 3
International Baccalaureate Computer Science (Higher Level)	The International Baccalaureate Organization	Passing Score = 3		Passing Score = 3
International Baccalaureate Information Technology in a Global Society (IB6613) (Standard Level)	The International Baccalaureate Organization	Passing Score = 3		Passing Score = 3
Note: New industry certification credentials and occupational competency assessments are printed in bold.				

Deletions to Board of Education's Approved Industry Certifications and Licenses					
November 29, 2006 (proposed)					
Certifications	Issuing Organization	Deletions			
Radiology Safety Examination	Virginia Board of Dentistry	Credential has been discontinued			
Air Cooled Gas Engine Assessment	National Occupational Competency Testing Institute (NOCTI)	Credential has been discontinued			
Advanced Concepts of Business and Marketing Certification	ASK Institute (DECA/MarkED)	Credential has been discontinued			
Fundamental Concepts of Business and Marketing Certification	ASK Institute (DECA/MarkED)	Credential has been discontinued			